### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Application No.:     |  |
|----------------------|--|
| Filing Date:         |  |
| Applicant:           | Rajan Rajendran et al.                     |
| Group Art Unit:      |  |
| Examiner:            |  |
| Title:               | CAPACITY MODULATION FOR PLURAL COMPRESSORS |
| Attorney Docket:     | 0315-000505/REA                            |
| Director of the Unit | ed States Patent and Trademark Office      |

Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

#### LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION 1.

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

#### II. COPIES

| A Submitted herewith is a legible copy of (i) each U.S. patent application            |
|---|
| publication and U.S. and foreign patent; (ii) each publication or that portion which  |
| caused it to be listed; (iii) for each cross-referenced pending U.S. application      |
| listed below in Section IV, the application specification including the claims, and   |
| any drawing of the application which caused it to be listed including the claims      |
| directed to that portion; and (iv) all other information or that portion which caused |
| it to be listed.  |

B. \_\_\_\_ Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

# U.S. Serial Number

|      | CX_ Because the present approximately no copies of the U.S. patents of listed on the attached Form 14 C.F.R. § 1.98(a)(2)(i). Any for listed on the attached Form 1449  | or U.S. patent application p<br>149 are enclosed pursuant<br>eign patent documents or   | ublications which are to the waiver of 37   |
|------|---|---|---|
|      | D This is a PCT application States. A copy of the Internation information. The documents list on the attached Form-1449 for any patent resulting from this appropriate to the US, EPO, or JPO sear have been supplied to the Us believed to be in the file of the all | nal Search Report is attach ted on the International Seaconsideration by the Examplication. If the International Chauthorities, copies of the SPTO under the trilateral | ed for the Examiner's arch Report are listed iner and for listing on al Search Report was ese references should agreement and are |
| III. | CONCISE EXPLANATION OF T  | HE RELEVANCE (check at  | least one box)  |
|      | A. X Except as may be indicor other information are in the required).   | *   | •   |
|      | B A concise explanation other information listed that is n C.F.R. § 1.98(a)(3)):  |   | · · · ·   |
|      | counterpart foreign<br>2English translation<br>3X Other: English A  | • •   |   |
|      | C. X The following addition consideration. The European sinformation.   |   |   |
| IV.  | CROSS REFERENCE TO RELA   | ATED APPLICATION(S)   |   |
|      | AThe Examiner is advise contain(s) subject matter that is bringing this(these) application does(do) not waive the confident   | may be related to the pre-<br>n(s) to the Examiner's a  | sent application. By ttention, Applicant(s)   |
|      | Serial No.  | Filing Date   | Art Unit  |

## V. THIS IDS IS BEING FILED UNDER

| A. <u>X</u> | 37 C.F.R. § 1.97(b): (check only one box)   |
|-------------|---|
|             | 1. X within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.   |
|             | 2 within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.  |
|             | 3 before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p). |
|             | 4 before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.   |
| B           | _37 C.F.R. § 1.97(c): (check only one box)  |
|             | before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.   |
|             | 1No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).   |
|             | 2See the certification below. No fee is required.   |
| C           | 37 C.F.R. § 1.97(d):  |
|             | after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.   |

1. \_\_\_\_See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

| VI.   | CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)   |
|-------|---|
|       | The undersigned hereby certifies that:  |
|       | A each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F. R. 1.704(d) below in section VII, if applicable; or  |
|       | B no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).  |
|       | CSome of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS. |
| VII.  | STATEMENT UNDER 37 CFR 1.704(d)   |
|       | The undersigned hereby states that:   |
|       | each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.  |
| VIII. | PAYMENT OF FEES (check only one box)  |
|       | A A check in the amount of \$180.00 is enclosed for the above-identified fee.   |
|       | BPlease charge Deposit Account No. 08-0750 in the amount of \$180.00 for  |

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

Dated:

fichael Malinzak, Reg. No

HARNESS, DICKEY & PIERCE, P.L.C. P.O. Box 828 Bloomfield Hills, Michigan 48303 (248) 641-1600

MM:ca

## FORM HDP-1449 (Based on Form PTO-1449)

# PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 2

| ATTORNEY DOCKET No.    | SERIAL NO. |  |
|------------------------|------------|--|
| 0315-000505/REA        |            |  |
| APPLICANT              |            |  |
| Rajan Rajendran et al. |            |  |
| FILING DATE            | GROUP      |  |
|                        |            |  |

| U.S. PATENT DOCUMENTS |                        |                    |         |                  |                    |                                 |
|-----------------------|------------------------|--------------------|---------|------------------|--------------------|---------------------------------|
| Ref.<br>Desig.        | Examiner's<br>Initials | Document<br>Number | Date    | Name             | Class/<br>Subclass | (If appropriate)<br>Filing Date |
| 1.                    |                        | 4,105,374          | 08-1979 | Scharf           |                    |                                 |
| 2.                    |                        | 4,205,537          | 06/1980 | Dubberley        |                    |                                 |
| 3.                    |                        | 4,252,506          | 02-1981 | Hannibal         |                    |                                 |
| 4.                    |                        | 4,277,955          | 07-1981 | Parker           |                    |                                 |
| 5.                    |                        | 4,358,254          | 11-1982 | Hannibal         |                    |                                 |
| 6.                    |                        | 4,396,360          | 08-1983 | Elson            |                    |                                 |
| 7.                    |                        | 5,002,470          | 03-1991 | Gormley et al.   |                    |                                 |
| 8.                    |                        | 5,123,818          | 06-1992 | Gormley et al.   |                    |                                 |
| 9.                    |                        | 5,211,031          | 05-1993 | Murayama et al.  |                    |                                 |
| 10.                   |                        | 5,328,344          | 07-1994 | Sato et al.      |                    |                                 |
| 11.                   |                        | 5,385,453          | 01-1995 | Fogt et al.      |                    |                                 |
| 12.                   |                        | 5,800,141          | 09-1998 | Ceylan et al.    |                    | ·                               |
| 13.                   |                        | 6,053,715          | 04-2000 | Hirano et al.    |                    |                                 |
| 14.                   |                        | 6,106,253          | 08-2000 | Sakai et al.     |                    |                                 |
| 15.                   |                        | 6,171,076          | 01-2001 | Gannaway         |                    |                                 |
| 16.                   |                        | 6,193,473          | 02-2001 | Mruk et al.      |                    |                                 |
| 17.                   |                        | 6,206,652          | 03-2001 | Caillat          |                    |                                 |
| 18.                   |                        | 6,213,731          | 04-2001 | Doepker et al.   |                    |                                 |
| 19.                   |                        | 6,267,572          | 07-2001 | Suefuji et al.   |                    |                                 |
| 20.                   |                        | 6,280,154          | 08-2001 | Clendenin et al. |                    |                                 |

| Examiner:                             | Date Considered: |
|---------------------------------------|------------------|
| · · · · · · · · · · · · · · · · · · · |                  |

## FORM HDP-1449 (Based on Form PTO-1449)

# PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 2 of 2

| ATTORNEY DOCKET NO.    | SERIAL NO. |
|------------------------|------------|
| 0315-000505/REA        |            |
| APPLICANT              |            |
| Rajan Rajendran et al. |            |
| FILING DATE            | GROUP      |
|                        |            |

| FORE           | FOREIGN PATENT DOCUMENTS |                    |         |         |                    |                 |          |
|----------------|--------------------------|--------------------|---------|---------|--------------------|-----------------|----------|
| Ref.<br>Desig. | Examiner's Initials      | Document<br>Number | Date    | Country | Class/<br>Subclass | Translat<br>Yes | on<br>No |
| 1.             |                          | EP 0747597         | 12-1996 | Europe  |                    |                 |          |
| 2.             |                          | EP 0980978         | 02-2000 | Europe  |                    |                 |          |
| 3.             |                          | EP 1087142         | 03-2001 | Europe  |                    |                 |          |
| 4.             |                          | JP 56165701        | 12-1981 | Japan . |                    |                 |          |
| 5.             |                          | JP 5738690 A       | 03-1982 | Japan   |                    |                 |          |
| 6.             |                          | JP 60053601        | 03-1985 | Japan   |                    |                 |          |
| 7.             |                          | JP 0294987 A       | 11-1989 | Japan   |                    |                 |          |
| 8.             |                          | JP 02140477        | 05-1990 | Japan   |                    |                 |          |
| 9.             |                          | JP 04031689        | 02-1992 | Japan   |                    |                 |          |
| 10.            |                          | JP 04121474 A      | 04-1992 | Japan   |                    |                 |          |
| 11.            |                          | JP 404203489       | 07-1992 | Japan   |                    |                 |          |
| 12.            |                          | JP 11141483        | 05-1999 | Japan   |                    |                 |          |
| 13.            |                          | WO 9917066         | 04-1999 | PCT     |                    |                 |          |

| OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.) |                        |  |  |
|--|------------------------|--|--|
| Ref.<br>Desig.   | Examiner's<br>Initials |  |  |
| 1.   |                        | European Search Report for Application No. EP 02 25 0369; dated 9 April 2003; 4 pages. |  |

| Examiner: | Date Considered: |
|-----------|------------------|